Beyond the Flight Deck

The Role of Maintenance Personnel in Emergency and Abnormal Situations

Who Gets Involved?

- 1 Dispatch
- Maintenance Control SAMC
- 1 Engineering
- Flight Ops duty manager
- 1 Engineering test flight
- Flight Attendants
- 1 ATC

UAL Maintenance Control

- Located in IND, LHR and SFO
- Separate organization from line maintenance
- Technical training on respective fleet type
- Some flight ops training, ex. LOFT. Familiarity with flight manuals.
- Qualified by fleet or engine type
- 1 Technical experts for line maintenance
- Primary customer is pilots
- 1 Handle all in-flight maintenance issues

How Maintenance Control Gets Involved

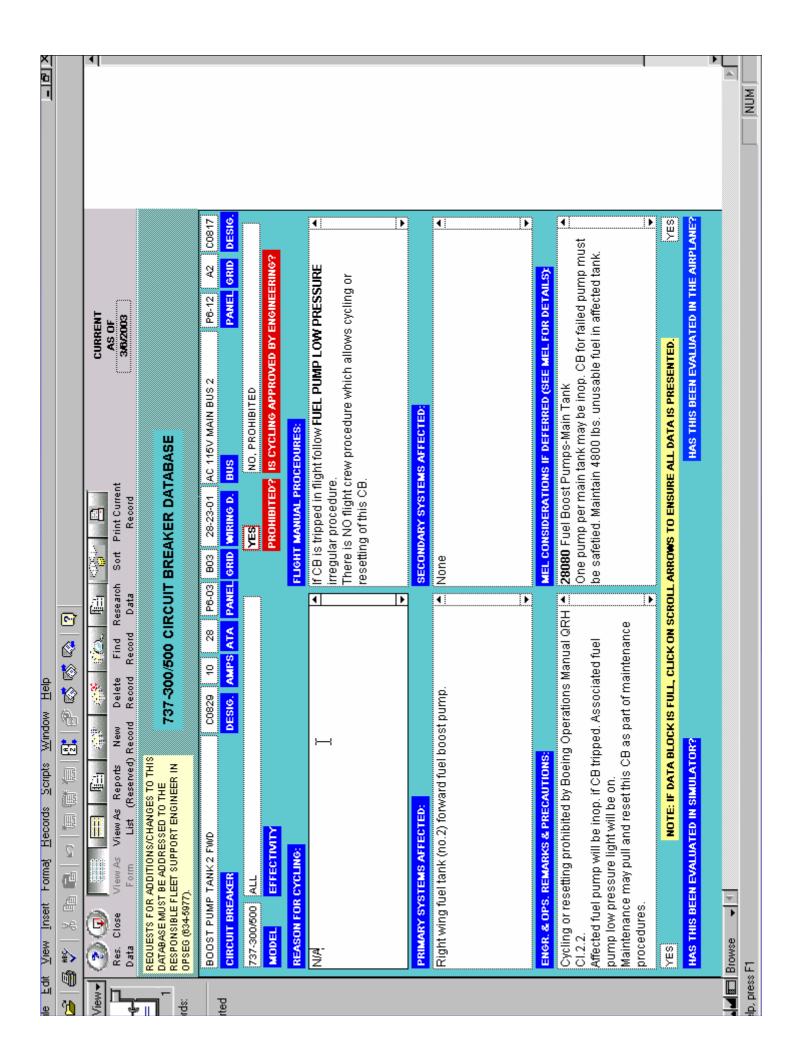
- 1 ACARs
- 1 RDI
- 1 ARINC
- 1 SATCOM
- 1 Dispatch
- 1 Cell phone
- 1 Air phone

Role of Maintenance Control

- Provide technical support
- Supplement flight manual
- 1 Suggested 'fix' depends on the operation
- 1 Think 'outside the box'
- Liaison with other support groups

Maintenance Control Tools

- ECM Engine condition monitoring
- 1 CMC Central maintenance computer data downloads
- 1 C/B database
- **AMIS** Aircraft maintenance history
- Supplemental databases and manuals



Real Life Examples

- DC10 Loss of all hydraulics
- 1 757 SVA failsafe message
- 1 757 Unable to extend gear
- ↑ 767 Engine stall
- 1 MD83 Stabilizer trim failure

Lessons Learned

- 1 Maintenance bias is to 'fix it'
- Crews need to establish clear expectations
- Need good communication and coordination
- Need better checklists and use of technology
- Maintenance needs more crew orientated training, primarily around irregular procedures

Challenges for the Future

- Define role of maintenance
- 1 Address FAA concerns
- Finding qualified candidates
- Develop better training and checklists
- Find ways to make technology work for you